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Application No.: 09/965,568

Reply to Office Action of: March 9, 2004

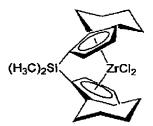
PC

Response dated: April 8, 2004

Listing of the claims:

Please amend the claims as follows:

- 1. 8. (Cancelled)
- 9. (Currently Amended) A mixed metallocene catalyst system comprising:
 - a dimethylsilyl-bridged bis-indenyl zirconocene dichloride, a) wherein said indenyl is saturated; and
 - b) a dimethylsilyl-bridged bis-indenyl zirconocene dichloride, wherein said indenyl is unsaturated wherein said a) is dimethylsilylbis(tetrahydro-1-indenyl) zirconium dichloride, b) is rac-dimethylsilylbis(1-indenyl)zirconium dichloride, and wherein said a) and said b) are present in said mixed metallocene catalyst system in a ratio of 60:40 to 40:60, and wherein said catalyst is activated by methyl alumoxane.
- 10. (Original) The mixed metallocene catalyst system of Claim 9 wherein said dimethylsilyl-bridged bis-indenyl zirconocene dichloride of a) has a structure represented by:



wherein said structure has substituents or is unsubstituted.

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- 11. (Currently Amended) The mixed metallocene catalyst system of Claim 10 wherein the substituents on the ring of said a) are the same or different.
- 12. (Currently Amended) The mixed metallocene catalyst system of Claim 10 wherein the ring of said a) is unsubstituted.
- 13. (Original) The mixed metallocene catalyst system of Claim 9 wherein said system is supported.
- 14. (Original) The mixed metallocene catalyst system of Claim 13 wherein said support is one of silica, silicates, clay, alumina, or composite oxides.
- 15. (Original) The mixed metallocene catalyst system of Claim 13 wherein said support is silica.
- 16. (Original) The mixed metallocene catalyst system of Claim 9 wherein said mixed metallocene catalyst system is activated by one of methylalumoxane, modified methylalumoxane, or non-coordinating anions, or mixtures thereof.
- 17. (Original) The mixed metallocene catalyst system of Claim 9 wherein said catalyst system is activated by methylalumoxane.
- 18. (Original) The mixed metallocene catalyst system of Claim 9 wherein said saturated a) and said unsaturated b) indenyl groups are present in said mixed metallocene catalyst system at a ratio of 90:10, 10:90; 80:20, 20:80; 60:40, 40:60; or 50:50.
- 19. (Cancelled)

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20. (Original) A mixed catalyst system comprising:

- a bridged indenyl zirconocene dichloride wherein the indenyl group is saturated, and the substituents at each position are hydrogen; and
- **b**) a bridged indenyl zirconocene dichloride, wherein the indenyl is unsaturated;

wherein said a) and said b) are each supported separately, on a silica support;

wherein said a) and b) are present in said mixed metallocene catalyst system in a ratio of 40:60 to 60:40; and

wherein said mixed catalyst system is activated by methylalumoxane.

21. - 28. (Cancelled)